

CLAIMS

1. A Fresnel lens sheet having a Fresnel lens element group, each Fresnel lens element being composed of a Fresnel lens surface and a non-lens surface on a surface thereof, characterized in that a surface roughness of at least one of the Fresnel lens surface of the Fresnel lens element group, the non-lens surface of the Fresnel lens element group, and a sheet surface, on which no Fresnel lens element group is formed, of the Fresnel lens sheet is made rougher from the central portion of the Fresnel lens sheet outwardly.
2. A Fresnel lens sheet according to claim 1, characterized in that when a distance from the central portion of the Fresnel lens sheet is shown by $x(\text{mm})$, an amount of change ($dRa(x)/dx$) of the surface roughness $Ra(x)$ (μm) of at least one of the Fresnel lens surface of the Fresnel lens element group, the non-lens surface of the Fresnel lens element group, and the sheet surface on which no Fresnel lens element group is formed is preferably $0 < dRa(x)/dx < 1.0$.
3. A Fresnel lens sheet according to claim 1 or 2, characterized in that the difference (ΔRa) between the surface roughness of the central portion of the Fresnel lens sheet and the surface roughness of the outer peripheral portion of the Fresnel lens sheet is $0.1 \mu\text{m}$ or more to $5.0 \mu\text{m}$ or less.
4. A Fresnel lens sheet according to any one of claims 1 to 3, characterized in that the surface roughness is made rougher continuously or stepwise from the central portion of the Fresnel lens sheet outwardly in a radial direction.
5. A Fresnel lens sheet according to any one of claims 1 to 3, characterized in that the surface roughness is made rougher continuously or stepwise from the central portion of the Fresnel lens sheet outwardly in a vertical direction.
6. A Fresnel lens sheet according to any one of claims 1 to 3, characterized in that the surface roughness is made rougher continuously or stepwise from the central portion of the Fresnel lens sheet outwardly in a horizontal direction.
7. A Fresnel lens sheet according to any one of claims 1 to 6,

characterized in that a lens shape for diffusing incident light in a vertical direction is formed on the sheet surface on which no Fresnel lens element group is formed.

8. A rear projection type screen characterized by comprising: a Fresnel lens sheet according to any one of claims 1 to 7; and a lenticular lens sheet for diffusing light having passed through the Fresnel lens sheet.